

Soil and Water Remediation, Groundwater/Vadose Zone (RL-0030)

**B. H. Ford, Vice President
(509) 373-3809**



*Drilling to Characterize Distribution of
Technetium-99 in 200-ZP-1 Operable Unit*



100-NR-2 Barrier Injections



VPP Star Status Achieved in FY 2007

Overview

This section addresses Project Baseline Summary (PBS) RL-0030, *Soil and Water Remediation, Groundwater/Vadose Zone*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of September 2007.

Top FY 2007 Accomplishments

River Corridor

- Completed installation of a 300-foot permeable reactive barrier at the 100-NR-2 Operable Unit in accordance with Tri-Party Agreement (TPA) Milestone M-16-14A.
- Expanded the 100-KR-4 Operable Unit pump and treat capacity by installing a new pump and treat system at 100-KW.

Central Plateau

- Submitted the Remedial Investigation (RI) Draft A Work Plan for the 200-BP-5 Operable Unit in accordance with TPA Milestone M-13-06B.
- Submitted the RI Draft A Work Plan for the 200-PO-1 Operable Unit one month ahead of the TPA Milestone M-13-10A due date.
- Submitted the RI/Feasibility Study (FS) Work Plan for supplemental characterization required for 200 Area Operable Units in accordance with TPA Milestone M-13-50.

Integration

- Obtained Voluntary Protection Program (VPP) Star Status in May 2007, demonstrating project commitment to safely achieving results.
- Installed 57 groundwater wells, including all 15 wells required to meet TPA Milestone M-24-57M (CY 2007 groundwater wells) and 8 wells in support of TPA Milestone M-24-57P (CY 2008 groundwater wells).
- Decommissioned 90 groundwater wells.

Notable September Accomplishments

River Corridor

- Completed installation of the second injection campaign at the 100-NR-2 Operable Unit permeable reactive barrier.
- Initiated injections of molasses at 100-D Area as part of the technology development treatability study for treating hexavalent chromium using in situ biostimulation.
- Completed two months of operation of electrocoagulation pump and treat at an average rate of 50 gallons per minute; extending operations into October for further testing.

Notable September Accomplishments (continued)

Central Plateau

- Submitted the Draft A Feasibility Study/Proposed Plan (FS/PP) for the 200-ZP-1 Operable Unit in September 2007 in accordance with TPA Milestone M-15-48B.
- Connected two T Farm wells to the 200 Effluent Treatment Facility (ETF) transfer line, thus enabling treatment of technetium-99 contaminated groundwater at the ETF.
- Completed evaluation of purolite resin for 200-ZP-1 pump and treat operations, determining that purolite is a cost-effective alternative for removal of technetium-99 and cobalt-60 from groundwater.
- Issued the 200-PO-1 Data Quality Objectives (DQO) Summary Report.

Integration

- Completed 96 percent of the scheduled FY 2007 groundwater well samples and eliminated a backlog of 125 wells from prior fiscal years.

FY 2007 Funds vs. Actuals (\$M)

	September 2007 Actual Funding	FY 2007 Actual Costs	Delta
Soil and Water Remediation, Groundwater/ Vadose Zone	\$ 91.7	\$ 76.0	\$ 15.8

Schedule/Cost Performance (\$M)

Soil & Water Remediation, Groundwater/Vadose Zone	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY07/ CTD)
Current Period (Month)	\$8.2	\$7.7	\$8.5	-\$0.5	-6.1%	-\$0.7	-9.6%	\$76.0
Cumulative-to-Date (FY 2004-Present)	\$208.6	\$201.5	\$202.3	-\$7.1	-3.4%	-\$0.8	-0.4%	\$304.3

Numbers are rounded to the nearest \$0.1M and include the Closure Services allocation.

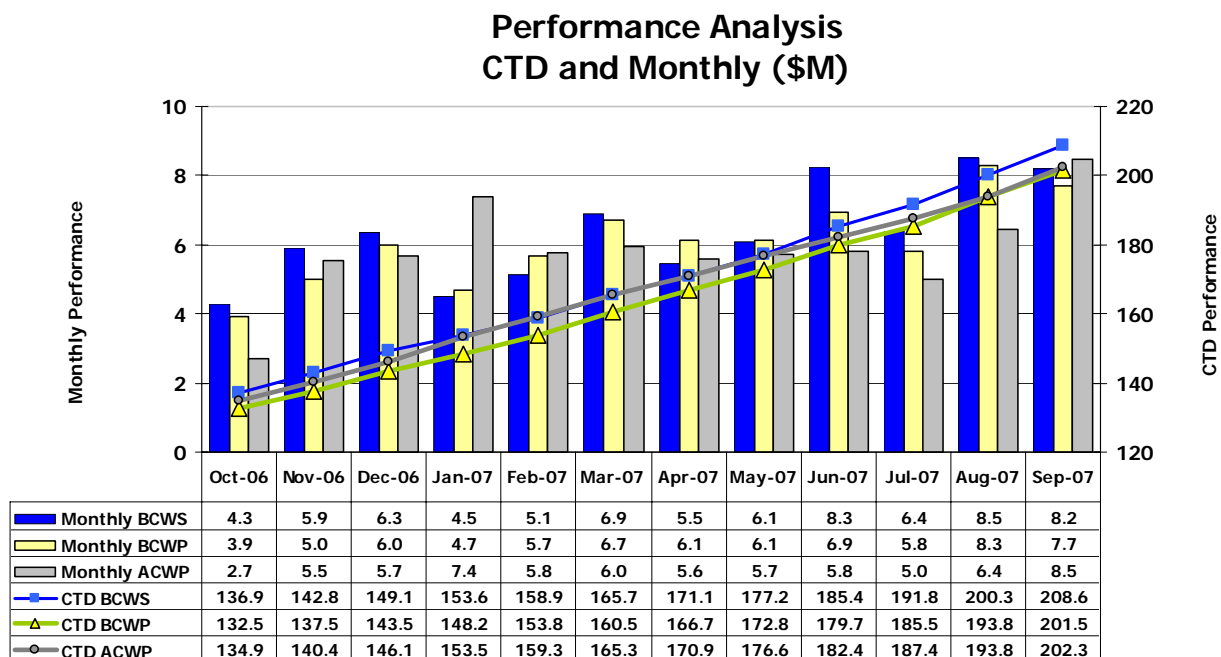
CTD Schedule Performance (-\$7.1M/-3.4%):

- The CTD schedule variance reflects delayed progress in three areas: 1) well drilling delays caused by unanticipated cultural resource issues and onsite labor shortages; 2) pump and treat system resin regeneration delays caused by prior months' offsite shipping restrictions, and 3) resource constraints associated with sampling and analysis. Schedule recovery will occur during FY 2008, enabling all contract commitments to be achieved prior to September 30, 2008.

CTD Cost Performance (-\$0.8M/-0.4%):

- Insignificant

Schedule/Cost Performance (\$M) (continued)



Milestone Achievement

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/Comments
M-013-06B	Submit the 200-BP-5 OU RI/FS Work Plan to EPA	TPA	3/31/07	3/30/07		Complete
M-016-14A	Complete Construction of a 300 foot Permeable Reactive Barrier Utilizing Apatite Sequestration at 100-N	TPA	5/31/07	3/25/07		Complete
M-015-48B	Submit the 200-ZP-1 OU Feasibility Study Report / Proposed Plan to EPA	TPA	9/30/07	9/13/07		Complete
M-013-10A	Submit the 200-PO-1 OU Remedial Investigation/Feasibility Study to Ecology	TPA	9/30/07	8/22/07		Complete
M-024-57M	Install a Cumulative of 60 Wells	TPA	12/31/07	4/6/07		Complete
M-015-50	Submit a Treatability Work Plan for Deep Vadose Zone Technetium and Uranium to Ecology and EPA	TPA	12/31/07		12/31/07	On Schedule